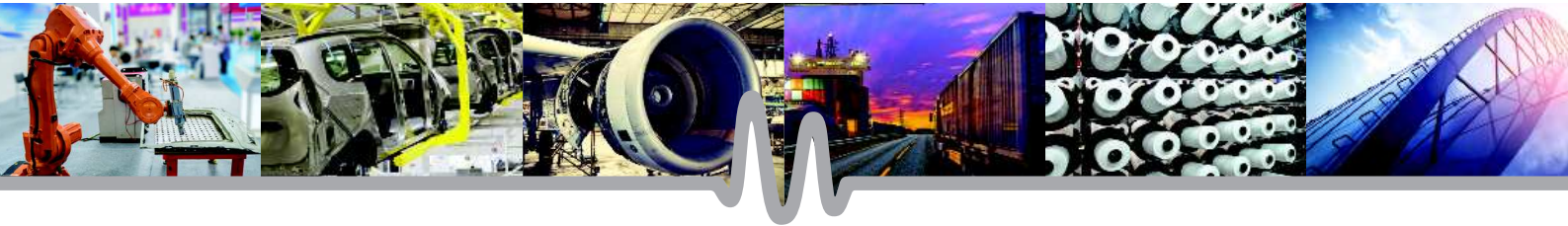
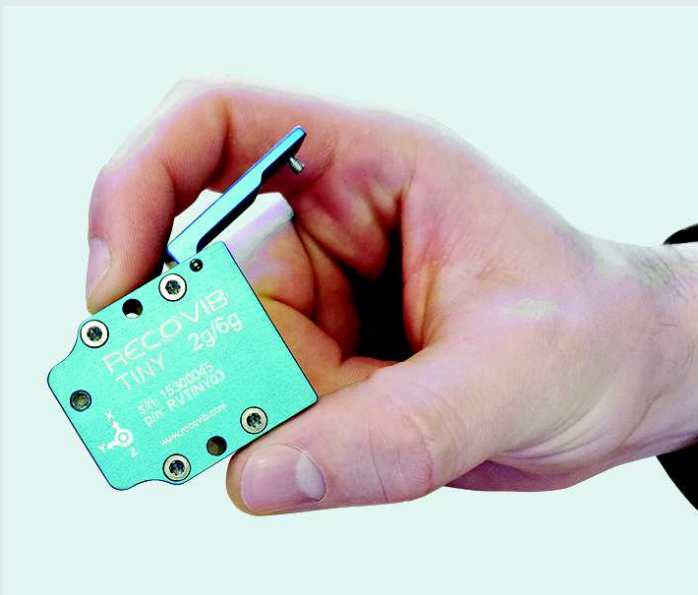


# RECOVIB

TINY



## 3-AXIS SHOCK & VIBRATION DATA LOGGER



### PROPERTIES

- 3 axis
- DC to 250Hz useful bandwidth
- Low noise
- 6-hours battery autonomy (1024 samples/second)
- 2 GB storage capacity
- Wireless during vibration measurements
- Compact and rugged design
- Protection grade IP65 - Total protection against dust & splashing water
- Several sensors can measure synchronously and simultaneously - Synchronization in millisecond level for several hours

### POSSIBLE USE

- “Quick & dirty” vibration monitoring & diagnosis
- Remote vibration diagnostic/consultancy
- Vibration measurement on rotating parts
- Vibration modal analysis
- Machine tools - Automotive - Aviation
- Missing equipment testing
- Structural analysis and health monitoring
- Traffic and transport sector



SYNCHRONISATION



STAND ALONE



ROBUST & SOLID



PRECISE



MINIATURE

### BENEFITS

Our new wireless vibration recorder, the RECOVIB Tiny measures vibrations and shocks in all three axis. It is extremely practical for a vibration diagnosis, offering up to 6 hours of measurement.

Its wireless technology and intuitive operation provides substantial time savings in the performance of your measurements.

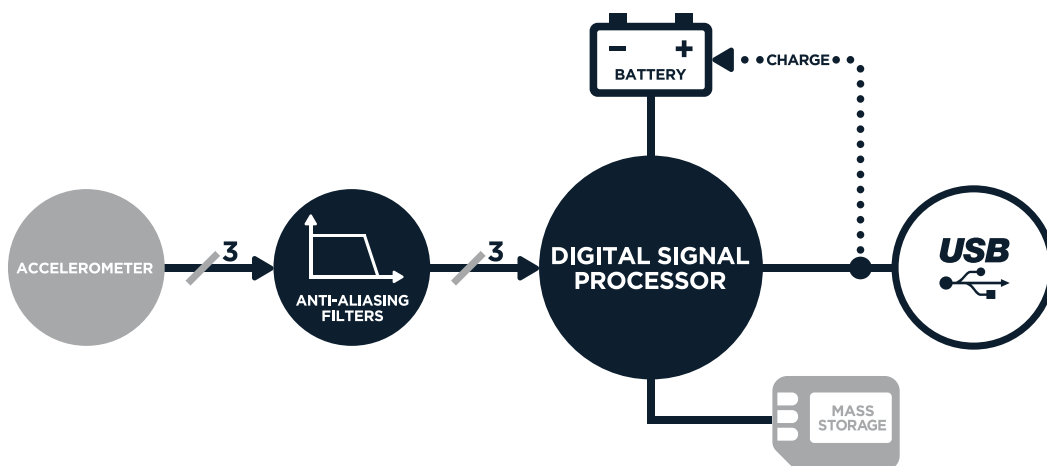
It is the only type of vibration and shock recorder that allows several sensors to be used simultaneously in a synchronised manner enabling the performance of modal analyses and operational deflection shape

analyses on large structures such as bridges or walkways.

We offer different measuring ranges :  $\pm 2/6G$ ,  $\pm 15G$ ,  $\pm 200G$ . It is able to record 1024 acceleration values (shocks and vibrations) per channel per second.

The RECOVIB Tiny is the smallest, lightest and the most robust recorder on the market that is able to perform recordings in extreme conditions ranging from  $-10^{\circ}C$  to  $+50^{\circ}C$ . It is also dust and water tight to IP65.

## BLOCK DIAGRAM



## OPERATION

To set up the RECOVIB Tiny, all you have to do is to connect the sensor to a PC or a smartphone via a USB connection. The supplied software allows for time synchronization with the PC, selection of the measuring range, as well as programming of the measurement interval.

When the sensor is disconnected from the PC or the smartphone and when the preset measurement start time is reached, the RECOVIB.Tiny begins to autonomously measure and store vibration values.

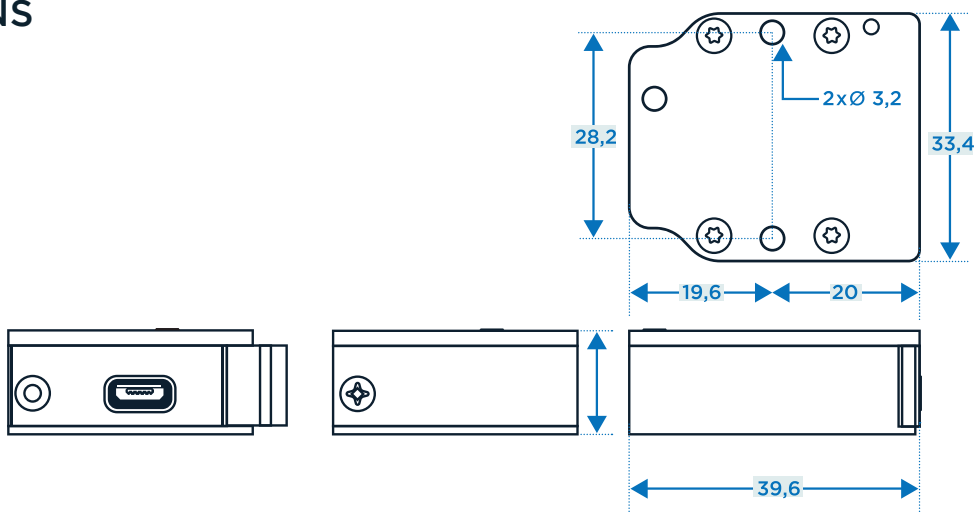
Once the preset stop time is reached, the RECOVIB.Tiny goes into sleep mode until it is reconnected to the PC or the smartphone.

The RECOVIB Tiny is therefore recognized by the PC or the smartphone as an external storage device. Thanks to the supplied software, the measurements of one or more sensors stored in a compact binary format can be converted to standard formats depending on user preference (text, csv, MATLAB™, LabVIEW™ formats).

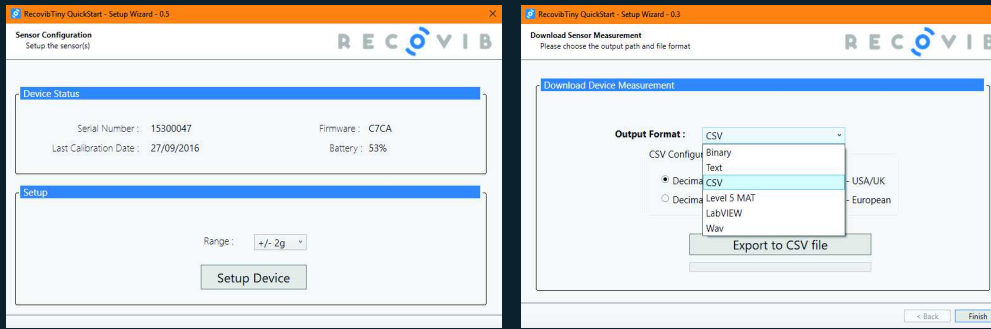
The Recovib Tiny is supplied with magnets for easy mounting.

When several synchronized sensors are used for a measurement, all the data are stored in one single file with one single time stamp.

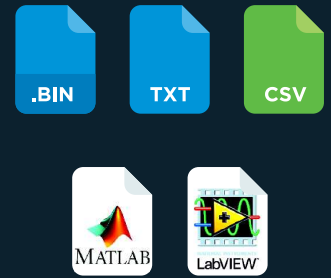
## DIMENSIONS



## SOFTWARE



## OUTPUT FILES FORMATS



## CERTIFICATIONS

	STANDARD	STANDARD REFERENCE	LIMIT LEVEL
<b>EMC COMPLIANCE</b>	Radiated Emission	EN 55016-2-3/CISPR 16-2-3	EN/IEC 61000-6-3 30MHZ - 1 GHZ
	Electrostatic Discharge Immunity	EN / IEC 61000-4-2	4 kV by contact 2, 4 & 8kV in air Criterion B
	Magnetic Field Immunity	EN / IEC 61000-4-8	80 A/m 50 & 60 Hz Criterion A
	Radiated, radio-frequency, electromagnetic field immunity	EN/IEC 61000-4-3	80 MHz - 1 GHz 10 V/m 1.4 - 2.0 GHz 3 V/m 2.0 - 2.7 GHz 1 V/m AM 80% 1 KHz Criterion A
<b>DUST &amp; WATER INGRESS PROTECTION LEVEL</b>	Degree of Protection provided by enclosures (IP code)	IEC 60529	IP65

## SPECIFICATIONS

	Model	$\pm 2g$ or $\pm 6g$	$\pm 15g$	$\pm 200g$
<b>MEASUREMENT CHARACTERISTICS</b>	Lower frequency limit	0Hz (DC)		
	Passband frequencies (per channel)	250 Hz		
	Storage rates (per channel)	1024 samples per second		
	Non-linearity	$\pm 0,5 \% \text{ F.S.}$	$\pm 0,3 \% \text{ F.S.}$	$\pm 0,5 \% \text{ F.S.}$
	Residual noise density	$30 \mu\text{g}/\sqrt{\text{Hz}}$	$300 \mu\text{g}/\sqrt{\text{Hz}}$	$2600 \mu\text{g}/\sqrt{\text{Hz}}$
	Residual noise (250 Hz bandwidth)	475 $\mu\text{g}$	4,75 $\mu\text{g}$	47 mg
	Transverse sensitivity	$\pm 2 \%$	$\pm 2 \%$	$\pm 2 \%$
<b>AUTONOMY</b>	Battery	6 hours		
	Storage	2GB		
<b>OUTPUTS FORMATS</b>	Binary, txt, csv, NI LabVIEW, MATLAB (Level 5 MAT-file)			
<b>ENVIRONMENTAL CHARACTERISTICS</b>	Operating Temperature range	-10 .. 50°C		
	Temperature coefficient of sensitivity	$\pm 0,01 \%/\text{°C}$	$\pm 0,01 \%/\text{°C}$	$\pm 0,02 \%/\text{°C}$
	Temperature drift of zero point	$\pm 0,4 \text{ mg}/\text{°C}$	$\pm 1 \text{ mg}/\text{°C}$	$\pm 30 \text{ mg}/\text{°C}$
	Protection grade	IP65		
<b>MECHANICAL DATA</b>	Weight	33.5gr		
	Case Material	Aluminum		

## ORDER REFERENCE

<b>RECOVIB-Tiny</b>	Sensor 2g/6g Reco_Tiny_2_6G	Sensor 15g Reco_Tiny_15G	Sensor 200g Reco_Tiny_200G
	Pot magnets x2	Pot magnets x2	Pot magnets x2
	USB cable x1	USB cable x1	USB cable x1

<b>Suitcase with accessories for one sensor: RECO_SUITCASE_1_ACC_EU/UK</b>		<b>Suitcase with accessories for 5 sensors: RECO_SUITCASE_5_ACC_EU/UK</b>	
Flat key x1	Charger (Eu or UK) x1	Flat key x1	Charging station (Eu or UK) x1
Software on USB key x1	Screwdriver x1	Software on USB key x1	Screwdriver x1